



# CITY OF RIVERSIDE

"People Serving  
People"

February 15, 2001

U.S. EPA Region 9  
ATTN: WTR-7, Biosolids Coordinator  
75 Hawthorne Street  
San Francisco, CA 94105-3901

**SUBJECT: Annual Report for 2000, Biosolids Disposal**

Dear Ms. Fondahl:

In compliance with 40 CFR Part 503, we are submitting the 2000 Annual Report of Biosolids Disposal for the City of Riverside Water Quality Control Plant.

If you have any questions or comments, please contact me at (909) 351-6187.

Sincerely,

John A. Claus  
Acting Wastewater Systems Manager

Enclosures

cc: Mark Adelson, Regional Water Quality Control Board  
Admin. File

\\PW-WQCP\VOL1\ADMIN\REGBD\SLUDGE\2000\503 Report Letter.doc

## PUBLIC WORKS DEPARTMENT

3900 MAIN STREET • RIVERSIDE, CALIFORNIA 92522 • (909) 782-5341  
FAX: (909)-782-5622

SEWERAGE SYSTEMS DIVISION • (909) 351-6140  
5950 ACORN STREET • FAX: (909) 687-6978

		City of Riverside year 2000 Biosolid conversion chart												
Land Applied	from statements	Month	amount sent in wet tons	WMT	Moisture %	convert to dry weight ww * 1- moisture		Composted	Month	amount sent in wet tons	convert to mwt	Moisture %	convert to dry weight ww * 1- moisture	
	Synagro	12	23.94	21.71	0.1932	17.52		One stop	12	604.6	548.37	0.1932	442.42	
	Synagro	11	191.64	173.82	0.168	144.62		One stop	11	366.67	332.57	0.168	276.7	
	Synagro	10	222.76	202.04	0.81	38.39		One stop	10	557.05	505.24	0.81	96	
	Synagro	9	711.04	644.91	0.1143	571.2		One stop	9	0	0	0.1143	0	
	Synagro	8	604.28	548.08	0.1205	482.04		One stop	8	553.06	501.63	0.1205	441.18	
	Synagro	7	1694.49	1536.9	0.0987	1385.21		One stop	7	0	0	0.0987	0	
	Synagro	6	986.17	894.46	0.2596	662.26		One stop	6	186.63	169.27	0.2596	125.33	
	Synagro	5	1033.57	937.45	0.2455	707.31		One stop	5	464.98	421.74	0.2455	318.2	
	Synagro	4	50.72	46	0.146	39.28		One stop	4	1059.53	960.99	0.146	820.69	
	Synagro	3	980.73	889.52	0.416	519.48		One stop	3	153.57	139.29	0.416	81.35	
	Synagro	2	0	0	0.2928	0		One stop	2	0	0	0.2928	0	
	Synagro	1	0	0	0.2683	0		One stop	1	0	0	0.2683	0	
Totals and averages			6499.34	5894.89		4567.31	Totals and averages			3946.09	3579.1		2601.87	
reported 1	5895.06						reported 1	3579.1						
DMT	4567.31						DMT	2601.87						
	Reported DMT produced		5490.27		Calculated DMT sent	7169.18								

## BACKGROUND INFORMATION

<b>1. NAME AND ADDRESS OF FACILITY</b> Facility Name <u>Riverside Regional Water Quality Control Plant</u> Address <u>5950 Acorn Street</u> City <u>Riverside</u> State <u>CA</u> Zip <u>92504</u> Facility Contact <u>John A. Claus</u> Phone <u>(909) 351-6187</u> Signatory _____		<b>2. NAME AND ADDRESS OF FACILITY OWNER</b> Facility Owner's Name <u>City of Riverside</u> Address <u>3900 Main Street</u> City <u>Riverside</u> State <u>CA</u> Zip <u>92522</u>	
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FROM	3. REPORTING PERIOD						
	YEAR	MO	DAY	TO	YEAR	MO	DAY
	2000	01	01		2000	12	31

CA010530
<b>4. NPDES PERMIT NUMBER</b>

5. SLUDGE PERMIT NUMBER

**6. FACILITY STATUS**  
☒ Preparer of sewage sludge  
☐ Land applier  
☐ Owner/operator of surface disposal site  
☐ Owner/operator of incinerator

## 7. TOTAL ANNUAL VOLUME OF SEWAGE SLUDGE

               ·           5 , 4 9 6 · 2 7     

Units: ☒ (metric tons; dry weight)  
☐ Other

8. FINAL USE AND DISPOSAL METHODS

☒ Land application

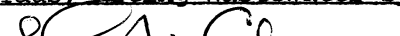
☐ Surface disposal

☐ Unlined or ☐ Lined

☐ Incineration.

☒ Other, explain Composting

D. Name and address of persons performing final use or disposal (attach additional sheets if necessary)			
<input type="checkbox"/> Same as preparer			
Facility Name	Synagro West, Inc.		
Address	P.O. Box 7027		
City	Corona	State	CA Zip 92878-7027
Facility Contact	Ross Patten		
Volume of sludge received from preparer	5,895.06 Metric Tons (Wet)		
Final use/disposal method for sludge	Land Application		
Facility Name	One Stop Landscape Supply		
Address	13024 San Timoteo Canyon Road		
City	Redlands	State	CA Zip 92373
Facility Contact	Louis Curti		
Volume of sludge received from preparer	3,579.10 Metric Tons (Wet)		
Final use/disposal method for sludge	Composting		
Facility Name			
Address			
City		State	Zip
Facility Contact			
Volume of sludge received from preparer			
Final use/disposal method for sludge			
Facility Name			
Address			
City		State	Zip
Facility Contact			
Volume of sludge received from preparer			
Final use/disposal method for sludge			

<b>10. CERTIFICATION</b> I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information submitted, it is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information.	
Name and Official Title (type or print) John A. Claus, Acting Wastewater System's Manager	Area Code and Phone (909) 351-6187
Signature 	Date Signed 02/15/01

## VECTOR ATTRACTION REDUCTION AND PATHOGEN REDUCTION

1. Facility Name Riverside Regional Water Quality Control Plant 2. Facility Owner's Name City of Riverside  
Address 5950 Acorn St. Address 3900 Main Street  
City Riverside City Riverside  
State CA Zip 92504 State CA Zip 92522
3. Monitoring Period: Reporting Period:  
From 01/01/00 To 02/29/00 From 01/01/00 To 02/29/00
4. NPDES Permit No: CA 0105350 Sludge Permit No: N/A
5. Facility Latitude: 33° 57' 55" N Facility Longitude: 117° 27' 28" W
- Site Map Attached Yes ☒ No ☐

6. Attach a description of vector attraction reduction procedures that identifies specific treatment units or activities and describes operating procedures. Include target values for all operating parameters such as treatment capacity, sludge detention time, operating temperature, pH, and percent solids. Also include a description of standard procedures for regular evaluation of the operating parameters.

16 Number of pages attached ☒ Schematic diagram or drawing attached.

### VECTOR ATTRACTION REDUCTION - OPTION 1 [40 CFR 503.33 (B)(1)]

7. The City of Riverside utilizes Alternative 1 (Mass of volatile solids in the sewage sludge been reduced by at least 38%) to demonstrate compliance with the regulations.

- a. Alternative 1 - Time and Temperature

Has the mass of volatile solids in the sewage sludge been reduced by at least 38%?

yes	no
<input checked="" type="checkbox"/>	<input type="checkbox"/>

Frequency volatile solids reduction is verified 38 per period.

### PATHOGENS REDUCTION CLASS B - ALTERNATIVE 2 [40 CFR 503.32 (B) (3)]

8. Anaerobic Digestion

- a. Was the residence time for the sewage sludge between 15 days at 35°C to 55°C and 60 days at 20°C?

yes	no
<input checked="" type="checkbox"/>	<input type="checkbox"/>

- b. Provide the frequency of temperature measurements (i.e. continuous, 1 per hour, etc.)  
1/shift, 3 shifts/day

- c. Provide the average detention time and digester operating temperature for the reporting period 18.4 days at 37.0 °C.

MONITORING PERIOD

January 1, 2000 through February 29, 2000

Parameter	Table 3 Pollutant Concentrations	Maximum Pollutant Concentration MG/KG	Frequency of Analysis	Sample Type, Grab or Composite	Analytical Method
Arsenic	41	11.8	2	Composite	6010B ICP
Cadmium	39	2.92	2	Composite	6010B ICP
Chromium	1200	43.8	2	Composite	6010B ICP
Copper	1500	768	2	Composite	6010B ICP
Lead	300	92.0	2	Composite	6010B ICP
Mercury	17	2.15	2	Composite	245.5 & 245.2
Molybdenum	--	17.5	2	Composite	6010B ICP
Nickel	420	35.8	2	Composite	6010B ICP
Selenium	36	9.25	2	Composite	6010B ICP
Zinc	2800	890	2	Composite	6010B ICP

Certification

I certify under penalty of law that this document and all attachments were prepared under my supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information submitted, it is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information.

John A. Claus, Operations Manager

Name and Title (Type or print)

(909) 351-6187

Area Code and Phone



Signature

3/22/00

Date Signed

Table 3 concentration limits are referenced to demonstrate that the sludge is of exceptional quality in regards to metals.

**Biosolids Processing Data**  
**January - February 2000**

DATE	Digester Influent	Digester Effluent	Average Volatile	Belt Press Discharge	Digester #1	Digester #2	Digester	
	Volatile Suspended Solids	Volatile Suspended Solids	Suspended Solids Reduction		Temperature	Temperature	Detention Time (days)	
	%	%	%	Dry Tons	°C	°C	Measured	Required
1/1/2000				9.65	37.0	37.0	16.7	9.0
1/2/2000				0.00	37.1	37.4	17.3	8.3
1/3/2000	82	69	50	19.40	37.0	37.0	17.1	9.0
1/4/2000	77	67	38	24.31	37.0	37.0	17.1	9.0
1/5/2000	81	67	53	40.21	37.0	37.0	16.6	9.0
1/6/2000	82	66	57	13.59	37.0	37.1	17.1	8.9
1/7/2000	82	67	55	12.81	37.3	37.1	17.8	8.4
1/8/2000				0.00	37.2	37.2	17.9	8.4
1/9/2000				0.00	38.0	38.0	17.9	6.0
1/10/2000	81	67	52	23.76	37.3	37.1	18.4	8.4
1/11/2000	81	67	53	27.76	37.0	37.0	18.5	9.0
1/12/2000	72	68	19	24.64	37.0	37.0	18.2	9.0
1/13/2000	82	67	56	12.44	37.0	37.2	19.0	8.8
1/14/2000	82	66	57	26.83	37.1	37.1	19.5	8.7
1/15/2000				0.00	37.1	37.1	21.5	8.7
1/16/2000				6.33	37.5	37.5	22.0	7.5
1/17/2000	81	67	51	24.71	37.5	37.0	21.8	8.3
1/18/2000	80	67	50	24.97	37.0	37.0	21.0	9.0
1/19/2000	81	67	51	29.86	37.6	37.6	20.4	7.2
1/20/2000	81	67	53	22.65	37.3	37.3	20.2	8.1
1/21/2000	81			11.34	37.0	37.0	19.8	9.1
1/22/2000				0.00	37.0	37.0	22.3	9.0
1/23/2000				0.00	37.0	37.0	19.6	9.0
1/24/2000	79	67	47	26.09	37.0	37.0	18.9	9.0
1/25/2000	80	67	50	25.33	37.2	37.2	19.1	8.5
1/26/2000	80	67	50	30.36	37.2	37.2	18.6	8.5
1/27/2000	80	66	53	24.94	37.0	37.0	18.5	9.0
1/28/2000	83	67	57	14.54	37.0	37.0	19.8	9.0
1/29/2000				0.00	37.0	37.0	22.2	9.0
1/30/2000				0.00	37.0	37.5	19.2	8.3
1/31/2000	81	66	53	23.76	37.0	37.0	18.6	9.0
2/1/2000	81	67	51	19.16	36.8	36.8	19.3	9.5
2/2/2000	81	67	54	19.07	36.5	36.2	19.4	11.0
2/3/2000	80	66	52	23.17	36.2	36.2	20.0	11.5
2/4/2000	81	67	53	22.76	36.6	36.2	20.1	10.9
2/5/2000				0.00	36.0	36.0	20.4	12.0
2/6/2000				0.00	37.0	37.0	19.4	9.0

**Biosolids Processing Data**  
**January - February 2000**

	Digester Influent	Digester Effluent	Average Volatile	Belt Press Discharge	Digester #1	Digester #2	Digester	
	Volatile Suspended Solids	Volatile Suspended Solids	Suspended Solids Reduction		Temperature	Temperature	Detention Time (days)	
DATE	%	%	%	Dry Tons	°C	°C	Measured	Required
2/7/2000	81	67	53	26.98	37.0	37.3	19.2	8.6
2/8/2000	80	66	52	27.93	37.2	36.2	18.4	10.0
2/9/2000	81			19.98	37.0	36.8	17.7	9.3
2/10/2000	81	68	50	19.69	37.0	37.0	18.6	9.0
2/11/2000	82			23.92	37.0	37.0	18.8	9.0
2/12/2000				0.00	37.0	37.0	18.5	9.0
2/13/2000				0.00	37.0	37.0	18.2	9.0
2/14/2000	81	68	49	18.08	37.0	37.0	18.3	9.0
2/15/2000	81	67	52	25.44	37.2	37.8	18.0	7.5
2/16/2000	81	67	52	33.75	37.3	37.3	17.2	8.1
2/17/2000	80	68	48	11.50	37.2	37.0	16.3	8.8
2/18/2000	81	65	55	25.94	37.0	37.0	16.1	9.0
2/19/2000				0.00	37.0	37.0	17.6	9.0
2/20/2000				0.00	37.0	37.0	17.5	9.0
2/21/2000	80	68	46	14.67	37.0	37.6	17.2	8.1
2/22/2000	79	68	43	20.89	37.0	37.0	15.6	9.0
2/23/2000	79	67	46	33.38	37.0	37.0	15.8	9.0
2/24/2000	79	67	45	26.74	37.0	37.2	16.0	8.8
2/25/2000	78	66	45	22.16	37.0	37.5	15.5	8.3
2/26/2000				0.00	37.0	37.0	13.8	9.0
2/27/2000				0.00	37.0	37.0	15.0	9.0
2/28/2000	79	66	48	26.93	36.6	37.0	15.1	9.6
2/29/2000	79	69	41	25.39	36.4	36.2	14.9	11.1
<b>Minimum</b>	<b>72</b>	<b>65</b>	<b>19</b>	<b>0.00</b>	<b>36.0</b>	<b>36.0</b>	<b>13.8</b>	<b>6.0</b>
<b>Maximum</b>	<b>83</b>	<b>69</b>	<b>57</b>	<b>40.21</b>	<b>38.0</b>	<b>38.0</b>	<b>22.3</b>	<b>12.0</b>
<b>Average</b>	<b>80</b>	<b>67</b>	<b>50</b>	<b>16.31</b>	<b>37.0</b>	<b>37.0</b>	<b>18.4</b>	<b>8.9</b>
<b>Total</b>				<b>962.41</b>				

## VECTOR ATTRACTION REDUCTION AND PATHOGEN REDUCTION

1. Facility Name Riverside Regional Water Quality Control Plant 2. Facility Owner's Name City of Riverside  
Address 5950 Acorn St. Address 3900 Main Street  
City Riverside City Riverside  
State CA Zip 92504 State CA Zip 92522
3. Monitoring Period: Reporting Period:  
From 03/01/00 To 04/30/00 From 03/01/00 To 04/30/00
4. NPDES Permit No: CA 0105350 Sludge Permit No: N/A
5. Facility Latitude: 33° 57' 55" N Facility Longitude: 117° 27' 28" W
- Site Map Attached Yes ☒ No ☐

6. Attach a description of vector attraction reduction procedures that identifies specific treatment units or activities and describes operating procedures. Include target values for all operating parameters such as treatment capacity, sludge detention time, operating temperature, pH, and percent solids. Also include a description of standard procedures for regular evaluation of the operating parameters.

16 Number of pages attached ☒ Schematic diagram or drawing attached.

### VECTOR ATTRACTION REDUCTION - OPTION 1 [40 CFR 503.33 (B)(1)]

7. The City of Riverside utilizes Alternative 1 (Mass of volatile solids in the sewage sludge been reduced by at least 38%) to demonstrate compliance with the regulations.

- a. Alternative 1 - Time and Temperature

Has the mass of volatile solids in the sewage sludge been reduced by at least 38%?

yes	no
<input checked="" type="checkbox"/>	<input type="checkbox"/>

Frequency volatile solids reduction is verified 33 per period.

### PATHOGENS REDUCTION CLASS B - ALTERNATIVE 2 [40 CFR 503.32 (B) (3)]

8. Anaerobic Digestion

- a. Was the residence time for the sewage sludge between 15 days at 35°C to 55°C and 60 days at 20°C?

yes	no
<input checked="" type="checkbox"/>	<input type="checkbox"/>

- b. Provide the frequency of temperature measurements (i.e. continuous, 1 per hour, etc.)  
1/shift, 3 shifts/day

- c. Provide the average detention time and digester operating temperature for the reporting period 16.3 days at 37.0 °C.



MONITORING PERIOD

March 1, 2000 through April 30, 2000

Parameter	Table 3 Pollutant Concentrations	Maximum Pollutant Concentration MG/KG	Frequency of Analysis	Sample Type, Grab or Composite	Analytical Method
Arsenic	41	11.5	2	Composite	6010B ICP
Cadmium	39	5.93	2	Composite	6010B ICP
Chromium	1200	61.9	2	Composite	6010B ICP
Copper	1500	838	2	Composite	6010B ICP
Lead	300	69.5	2	Composite	6010B ICP
Mercury	17	1.28	2	Composite	245.5
Molybdenum	--	19.4	2	Composite	6010B ICP
Nickel	420	45.6	2	Composite	6010B ICP
Selenium	36	7.3	2	Composite	6010B ICP
Zinc	2800	985	2	Composite	6010B ICP

Certification

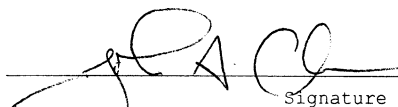
I certify under penalty of law that this document and all attachments were prepared under my supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information submitted, it is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information.

John A. Claus, Operations Manager

Name and Title (Type or print)

(909) 351-6187

Area Code and Phone



Signature

5/23/00

Date Signed

Table 3 concentration limits are referenced to demonstrate that the sludge is of exceptional quality in regards to metals.

Water Reclamation Division  
Public Works Department  
City of Riverside, CA

Monthly Sludge Disposal Report

<u>March</u>	<u>2000</u>
Month	Year

During this month, 980.73 tons of Biosolids were removed by our subcontractor, Synagro of California, Inc., located at P.O. Box 7027, Corona, CA, 92878-7027. They are currently performing land application of the biosolids. During this month, 153.57 tons of Biosolids were removed by our subcontractor, One Stop Landscape Supply, located at 13024 San Timoteo Canyon Road, Redlands, CA 92373. They are currently performing composting with the biosolids.

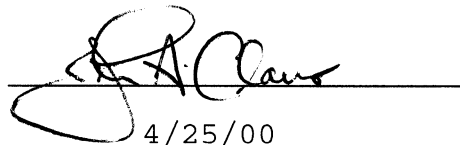
Laboratory analysis data is attached certifying the Biosolids generated at this plant to be a clean Class B sludge.

Digester data is attached certifying the Biosolids have met the time and temperature requirements for Class B Pathogen Reduction through Anaerobic Digestion as well as the Vector Attraction requirement of more than 38% volatile solids reduction.

"I certify, under penalty of law, that the Class B pathogen requirements in 503.32(b) and the vector attraction reduction requirement in 503.33(b)1 have been met. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the pathogen and vector attraction reduction requirements have been met. I am aware that there are significant penalties for false certification including fine and imprisonment."

Signature

Date

  
\_\_\_\_\_  
4/25/00

Water Reclamation Division  
Public Works Department  
City of Riverside, CA

Monthly Sludge Disposal Report

April            2000  
Month            Year

During this month, 50.72 tons of Biosolids were removed by our subcontractor, Synagro of California, Inc., located at P.O. Box 7027, Corona, CA, 92878-7027. They are currently performing land application of the biosolids. During this month, 1,059.53 tons of Biosolids were removed by our subcontractor, One Stop Landscape Supply, located at 13024 San Timoteo Canyon Road, Redlands, CA 92373. They are currently performing composting with the biosolids.

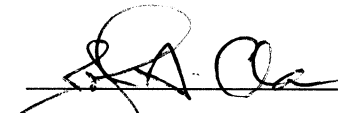
Laboratory analysis data is attached certifying the Biosolids generated at this plant to be a clean Class B sludge.

Digester data is attached certifying the Biosolids have met the time and temperature requirements for Class B Pathogen Reduction through Anaerobic Digestion as well as the Vector Attraction requirement of more than 38% volatile solids reduction.

"I certify, under penalty of law, that the Class B pathogen requirements in 503.32(b) and the vector attraction reduction requirement in 503.33(b)1 have been met. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the pathogen and vector attraction reduction requirements have been met. I am aware that there are significant penalties for false certification including fine and imprisonment."

Signature

Date

  
\_\_\_\_\_  
5/23/00

**Biosolids Processing Data**  
**March - April 2000**

	Digester Influent	Digester Effluent	Average Volatile	Belt Press Discharge	Digester #1	Digester #2	Digester	
	Volatile Suspended Solids	Volatile Suspended Solids	Suspended Solids Reduction		Temperature	Temperature	Detention Time (days)	
DATE	%	%	%	Dry Tons	°C	°C	Measured	Required
3/1/2000	81			18.63	34.3	36.5	15.2	13.8
3/2/2000	80	66	52	24.39	36.5	36.0	14.9	11.3
3/3/2000	80	66	52	22.86	36.8	36.0	15.5	10.8
3/4/2000				18.47	36.0	36.0	15.1	12.0
3/5/2000				22.03	37.0	37.0	15.2	9.0
3/6/2000	80	65	55	22.48	37.5	37.0	15.7	8.3
3/7/2000	80	66	51	24.07	37.0	37.5	16.9	8.3
3/8/2000	80	66	52	32.34	36.6	37.5	15.9	8.9
3/9/2000	79			19.75	35.8	37.0	15.9	10.8
3/10/2000	79	66	48	16.29	35.5	37.0	15.4	11.3
3/11/2000				0.00	35.0	37.0	15.7	12.0
3/12/2000				0.00	34.5	37.1	15.8	12.6
3/13/2000	79	66	50	26.61	35.0	37.0	16.0	12.0
3/14/2000	80	65	53	21.38	36.2	37.2	16.2	10.0
3/15/2000	80	65	54	28.40	37.0	37.0	16.1	9.0
3/16/2000	81			22.05	37.2	37.2	16.6	8.5
3/17/2000				22.77	37.2	37.2	16.4	8.5
3/18/2000				0.00	37.0	37.0	15.6	9.0
3/19/2000				0.00	37.2	37.2	16.4	8.4
3/20/2000	79	66	49	24.02	37.0	37.0	16.2	9.0
3/21/2000	79	65	51	23.49	37.0	37.0	16.1	9.0
3/22/2000	80			29.35	37.0	37.0	15.6	9.0
3/23/2000		65		20.16	37.0	37.0	18.2	9.0
3/24/2000	80	66	52	23.29	37.0	37.0	14.5	9.0
3/25/2000				0.00	37.0	37.0	15.2	9.0
3/26/2000				0.00	37.0	37.0	15.1	9.0
3/27/2000	79	66	47	23.97	37.0	37.0	15.2	9.0
3/28/2000	79	66	50	25.10	37.3	37.5	16.0	7.8
3/29/2000	80	65	54	30.43	37.0	37.0	16.5	9.0
3/30/2000	79	63	56	23.83	37.0	37.0	16.7	9.0
3/31/2000	80	65	53	23.52	37.0	37.0	16.8	9.0
4/1/2000				0.00	37.0	37.0	16.8	9.0
4/2/2000				0.00	37.0	37.0	16.6	9.0
4/3/2000	80	66	51	23.52	37.0	37.0	17.2	9.0
4/4/2000	80	66	51	19.62	37.2	37.2	16.6	8.5
4/5/2000	80	65	52	28.43	37.0	37.0	17.0	9.0
4/6/2000	79	66	49	24.72	37.0	37.0	17.3	9.0

## Biosolids Processing Data

### March - April 2000

	Digester Influent	Digester Effluent	AverageVolatile	Belt Press Discharge	Digester #1	Digester #2	Digester	
	Volatile Suspended Solids	Volatile Suspended Solids	Suspended Solids Reduction		Temperature	Temperature	Detention Time (days)	
DATE	%	%	%	Dry Tons	°C	°C	Measured	Required
4/7/2000	80			12.13	37.0	37.5	17.7	8.3
4/8/2000				0.00	37.0	37.0	17.5	9.0
4/9/2000				0.00	37.0	37.0	17.3	9.0
4/10/2000	79	67	46	23.29	37.0	37.0	16.6	9.0
4/11/2000	80			17.49	37.0	37.2	15.8	8.8
4/12/2000	80	67	51	31.10	37.5	37.5	15.9	7.5
4/13/2000	80	67	48	21.49	37.0	37.0	17.6	9.0
4/14/2000	81	67	52	20.16	37.0	37.0	15.8	9.0
4/15/2000				0.00	37.0	37.0	16.2	9.0
4/16/2000				0.00	37.3	37.5	16.4	7.8
4/17/2000	80	66	52	24.93	37.0	37.0	14.9	9.0
4/18/2000	80	66	52	25.99	36.5	37.0	14.8	9.8
4/19/2000	81	67	52	32.30	36.6	37.0	16.1	9.6
4/20/2000	82	67	54	24.88	36.5	37.0	15.9	9.8
4/21/2000	81	66	55	12.44	36.0	37.0	16.0	10.5
4/22/2000				0.00	37.0	37.1	19.4	8.9
4/23/2000				0.00	37.1	37.1	15.5	8.7
4/24/2000	81	67	52	24.77	37.6	37.6	16.7	7.2
4/25/2000		67		23.25	37.2	37.2	16.9	8.5
4/26/2000	82	65	59	32.06	37.0	37.0	17.0	9.0
4/27/2000	81	66	54	21.29	38.0	38.0	16.8	6.0
4/28/2000	80			0.00	37.3	37.5	16.7	7.8
4/29/2000				0.00	37.0	37.0	17.2	9.0
4/30/2000				7.72	37.0	37.0	16.8	9.0
Minimum	79	63	46	0.00	34.3	36.0	14.5	6.0
Maximum	82	67	59	32.34	38.0	38.0	19.4	13.8
Average	80	66	52	17.07	36.8	37.1	16.3	9.2
Total				1041.25				

**VECTOR ATTRACTION REDUCTION AND PATHOGEN REDUCTION**

1. Facility Name Riverside Regional Water 2. Facility Owner's Name City of  
Quality Control Plant Riverside

Address 5950 Acorn St.

Address 3900 Main Street

City Riverside

City Riverside

State CA Zip 92504

State CA Zip 92522

3. Monitoring Period:

Reporting Period:

From 05/01/00 To 06/30/00

From 05/01/00 To 06/30/00

NPDES Permit No: CA 0105350

Sludge Permit No: N/A

5. Facility Latitude: 33° 57' 55" N Facility Longitude: 117° 27' 28" W

Site Map Attached Yes ☒ No ☐

6. Attach a description of vector attraction reduction procedures that identifies specific treatment units or activities and describes operating procedures. Include target values for all operating parameters such as treatment capacity, sludge detention time, operating temperature, pH, and percent solids. Also include a description of standard procedures for regular evaluation of the operating parameters.

16 Number of pages attached ☒ Schematic diagram or drawing attached.

**VECTOR ATTRACTION REDUCTION - OPTION 1 [40 CFR 503.33 (B)(1)]**

7. The City of Riverside utilizes Alternative 1 (Mass of volatile solids in the sewage sludge been reduced by at least 38%) to demonstrate compliance with the regulations.

a. Alternative 1 - Time and Temperature

Has the mass of volatile solids in the sewage sludge been reduced by at least 38%?

yes	no
<input checked="" type="checkbox"/>	<input type="checkbox"/>

Frequency volatile solids reduction is verified 41 per period.

**PATHOGENS REDUCTION CLASS B - ALTERNATIVE 2 [40 CFR 503.32 (B) (3)]**

8. Anaerobic Digestion

a. Was the residence time for the sewage sludge between 15 days at 35°C to 55°C and 60 days at 20°C?

yes	no
<input checked="" type="checkbox"/>	<input type="checkbox"/>

b. Provide the frequency of temperature measurements (i.e. continuous, 1 per hour, etc.)  
1/shift, 3 shifts/day

c. Provide the average detention time and digester operating temperature for the reporting period 16.1 days at 37.7 °C.

MONITORING PERIOD

May 1, 2000 through June 30, 2000

Parameter	Table 3 Pollutant Concentrations	Maximum Pollutant Concentration MG/KG	Frequency of Analysis	Sample Type, Grab or Composite	Analytical Method
Arsenic	41	9.69	2	Composite	6010B ICP
Cadmium	39	4.44	2	Composite	6010B ICP
Chromium	1200	37.2	2	Composite	6010B ICP
Copper	1500	523	2	Composite	6010B ICP
Lead	300	49.2	2	Composite	6010B ICP
Mercury	17	1.22	2	Composite	245.5
Molybdenum	--	12.7	2	Composite	6010B ICP
Nickel	420	28.9	2	Composite	6010B ICP
Selenium	36	6.46	2	Composite	6010B ICP
Zinc	2800	628	2	Composite	6010B ICP

Certification

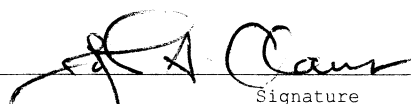
I certify under penalty of law that this document and all attachments were prepared under my supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information submitted, it is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information.

John A. Claus, Operations Manager

Name and Title (Type or print)

(909) 351-6187

Area Code and Phone



Signature

7/25/00

Date Signed

Table 3 concentration limits are referenced to demonstrate that the sludge is of exceptional quality in regards to metals.

Water Reclamation Division  
Public Works Department  
City of Riverside, CA

Monthly Sludge Disposal Report

May                      2000  
Month                      Year

During this month, 1,033.74 tons of Biosolids were removed by our subcontractor, Synagro of California, Inc., located at P.O. Box 7027, Corona, CA, 92878-7027. They are currently performing land application of the biosolids. During this month, 464.98 tons of Biosolids were removed by our subcontractor, One Stop Landscape Supply, located at 13024 San Timoteo Canyon Road, Redlands, CA 92373. They are currently performing composting with the biosolids.

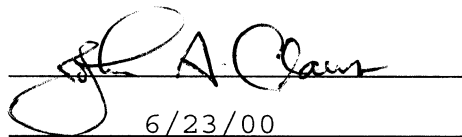
Laboratory analysis data is attached certifying the Biosolids generated at this plant to be a clean Class B sludge.

Digester data is attached certifying the Biosolids have met the time and temperature requirements for Class B Pathogen Reduction through Anaerobic Digestion as well as the Vector Attraction requirement of more than 38% volatile solids reduction.

"I certify, under penalty of law, that the Class B pathogen requirements in 503.32(b) and the vector attraction reduction requirement in 503.33(b)1 have been met. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the pathogen and vector attraction reduction requirements have been met. I am aware that there are significant penalties for false certification including fine and imprisonment."

Signature

Date

  
6/23/00



Water Reclamation Division  
Public Works Department  
City of Riverside, CA

Monthly Sludge Disposal Report

June  
Month

2000  
Year

During this month, 986.17 tons of Biosolids were removed by our subcontractor, Synagro of California, Inc., located at P.O. Box 7027, Corona, CA, 92878-7027. They are currently performing land application of the biosolids. During this month, 186.63 tons of Biosolids were removed by our subcontractor, One Stop Landscape Supply, located at 13024 San Timoteo Canyon Road, Redlands, CA 92373. They are currently performing composting with the biosolids.

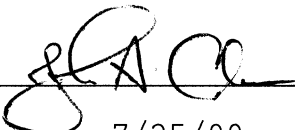
Laboratory analysis data is attached certifying the Biosolids generated at this plant to be a clean Class B sludge.

Digester data is attached certifying the Biosolids have met the time and temperature requirements for Class B Pathogen Reduction through Anaerobic Digestion as well as the Vector Attraction requirement of more than 38% volatile solids reduction.

"I certify, under penalty of law, that the Class B pathogen requirements in 503.32(b) and the vector attraction reduction requirement in 503.33(b)1 have been met. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the pathogen and vector attraction reduction requirements have been met. I am aware that there are significant penalties for false certification including fine and imprisonment."

Signature

Date

  
7/25/00

**Biosolids Processing Data**  
**May - June 2000**

	Digester Influent	Digester Effluent	Average Volatile	Belt Press Discharge	Digester #1	Digester #2	Digester	
	Volatile Suspended Solids	Volatile Suspended Solids	Suspended Solids Reduction		Temperature	Temperature	Detention Time (days)	
DATE	%	%	%	Dry Tons	°C	°C	Measured	Required
5/1/2000				23.18	37.6	37.3	16.6	7.6
5/2/2000	80	67	48	19.85	38.0	37.6	16.1	6.6
5/3/2000	80	68	47	30.55	37.3	37.3	15.5	8.3
5/4/2000	80	67	50	18.46	37.0	37.5	15.3	8.3
5/5/2000	80	66	51	15.27	37.0	37.0	15.3	9.0
5/6/2000					37.0	37.0	15.8	9.0
5/7/2000				10.81	37.8	37.5	16.6	7.0
5/8/2000	80	67	49	23.73	38.0	37.3	15.9	7.1
5/9/2000	80	67	50	23.16	37.3	37.5	15.9	7.8
5/10/2000	80	68	45	30.30	37.0	37.0	16.2	9.0
5/11/2000	79	67	47	12.24	35.5	37.0	15.9	11.3
5/12/2000	79	66	49	24.64	37.0	37.0	15.6	9.0
5/13/2000					37.0	37.0	15.6	9.0
5/14/2000					37.5	37.3	16.1	7.9
5/15/2000	80	67	48	25.12	38.0	37.0	14.6	7.5
5/16/2000	80	66	50	25.22	37.5	37.3	15.4	7.8
5/17/2000	80	67	49	31.04	38.0	37.6	15.0	6.6
5/18/2000	80	65	53	21.57	38.6	37.5	15.2	5.9
5/19/2000	80	67	50	26.25	36.6	36.6	14.8	10.2
5/20/2000					37.0	37.0	14.8	9.0
5/21/2000					36.7	37.8	15.3	8.3
5/22/2000	79	67	47	23.59	37.8	37.5	19.3	7.1
5/23/2000	79	67	46	20.35	37.5	37.5	16.1	7.5
5/24/2000				30.09	36.6	37.3	15.4	9.1
5/25/2000	80	67	49	18.97	37.2	38.0	15.3	7.3
5/26/2000	80	66	51		37.0	38.0	16.3	7.5
5/27/2000					37.0	37.0	15.3	9.0
5/28/2000				11.33	38.0	38.0	15.4	6.0
5/29/2000	80	66	53	22.85	38.0	37.6	16.2	6.6
5/30/2000	80	68	48	11.13	38.0	38.0	15.6	6.0
5/31/2000	80	67	49	32.68	37.8	37.8	16.1	6.5
6/1/2000	80	67	50	25.00	38.0	38.0	16.3	6.0
6/2/2000	80	66	51	25.03	38.0	38.0	17.1	6.0
6/3/2000				0.00	38.0	38.0	16.8	6.0
6/4/2000				0.00	38.0	38.0	16.8	6.0
6/5/2000	79	66	49	22.78	38.0	38.0	16.6	6.0
6/6/2000	79	66	50	23.45	38.0	38.0	16.8	6.0

**Biosolids Processing Data**  
**May - June 2000**

DATE	Digester Influent	Digester Effluent	Average Volatile	Belt Press Discharge	Digester #1	Digester #2	Digester	
	Volatile Suspended Solids	Volatile Suspended Solids	Suspended Solids Reduction		Temperature	Temperature	Detention Time (days)	
	%	%	%	Dry Tons	°C	°C	Measured	Required
6/7/2000	80	67	49	31.17	38.0	38.0	16.9	6.0
6/8/2000	80	66	51	22.85	38.0	38.0	16.2	6.0
6/9/2000	80	67	49	18.49	38.0	38.0	15.8	6.0
6/10/2000				0.00	38.0	38.0	15.7	6.0
6/11/2000				0.00	38.0	38.0	16.0	6.0
6/12/2000	80	66	51	23.32	38.0	38.0	15.5	6.0
6/13/2000	80	66	52	23.63	38.0	38.0	15.1	6.0
6/14/2000	80			16.58	38.0	38.0	15.1	6.0
6/15/2000	79	66	49	16.38	38.0	38.0	14.8	6.0
6/16/2000	80	67	50	23.69	38.0	38.0	15.7	6.0
6/17/2000				0.00	38.0	38.0	14.0	6.0
6/18/2000				9.75	38.0	38.0	14.5	6.0
6/19/2000	79	66	49	26.16	38.0	38.0	14.7	6.0
6/20/2000	79	66	47	26.16	38.0	38.0	14.3	6.0
6/21/2000	79	67	47	34.36	38.0	37.8	14.3	6.3
6/22/2000	81	67	51	26.08	38.0	38.0	14.8	6.0
6/23/2000	79	67	48	17.93	38.0	38.0	14.8	6.0
6/24/2000				0.00	38.0	38.0	17.5	6.0
6/25/2000				0.00	38.0	38.0	19.8	6.0
6/26/2000	79	67	47	18.32	38.0	38.0	19.4	6.0
6/27/2000	79	66	49	23.61	38.0	38.0	19.3	6.0
6/28/2000	79	66	48	16.78	38.1	37.9	19.6	6.0
6/29/2000	79			14.42	38.0	38.0	19.1	6.0
6/30/2000	79	68	42	8.98	38.0	38.0	19.9	6.0
Minimum	79	65	42	0.00	35.5	36.6	14.0	5.9
Maximum	81	68	53	34.36	38.6	38.0	19.9	11.3
Average	80	67	49	19.02	37.7	37.7	16.1	7.0
Total				1027.31				

## VECTOR ATTRACTION REDUCTION AND PATHOGEN REDUCTION

1. Facility Name Riverside Regional Water 2. Facility Owner's Name City of  
Quality Control Plant Riverside

Address 5950 Acorn St.

Address 3900 Main Street

City Riverside

City Riverside

State CA Zip 92504

State CA Zip 92522

3. Monitoring Period:

Reporting Period:

From 07/01/00 To 08/31/00

From 07/01/00 To 08/31/00

4. NPDES Permit No: CA 0105350

Sludge Permit No: N/A

5. Facility Latitude: 33° 57' 55" N Facility Longitude: 117° 27' 28" W

Site Map Attached Yes ☒ No ☐

6. Attach a description of vector attraction reduction procedures that identifies specific treatment units or activities and describes operating procedures. Include target values for all operating parameters such as treatment capacity, sludge detention time, operating temperature, pH, and percent solids. Also include a description of standard procedures for regular evaluation of the operating parameters.

16 Number of pages attached ☒ Schematic diagram or drawing attached.

### VECTOR ATTRACTION REDUCTION - OPTION 1 [40 CFR 503.33 (B)(1)]

7. The City of Riverside utilizes Alternative 1 (Mass of volatile solids in the sewage sludge been reduced by at least 38%) to demonstrate compliance with the regulations.

a. Alternative 1 - Time and Temperature

Has the mass of volatile solids in the sewage sludge been reduced by at least 38%?

yes	no
<input checked="" type="checkbox"/>	<input type="checkbox"/>

Frequency volatile solids reduction is verified 44 per period.

### PATHOGENS REDUCTION CLASS B - ALTERNATIVE 2 [40 CFR 503.32 (B) (3)]

8. Anaerobic Digestion

a. Was the residence time for the sewage sludge between 15 days at 35°C to 55°C and 60 days at 20°C?

yes	no
<input checked="" type="checkbox"/>	<input type="checkbox"/>

b. Provide the frequency of temperature measurements (i.e. continuous, 1 per hour, etc.)

1/shift, 3 shifts/day

c. Provide the average detention time and digester operating temperature for the reporting period 15.5 days at 38.1 °C.

MONITORING PERIOD

July 1, 2000 through August 31, 2000

Parameter	Table 3 Pollutant Concentrations	Maximum Pollutant Concentration MG/KG	Frequency of Analysis	Sample Type, Grab or Composite	Analytical Method
Arsenic	41	11.1	2	Composite	6010B ICP
Cadmium	39	3.15	2	Composite	6010B ICP
Chromium	1200	50.6	2	Composite	6010B ICP
Copper	1500	761	2	Composite	6010B ICP
Lead	300	59.7	2	Composite	6010B ICP
Mercury	17	1.36	2	Composite	245.5
Molybdenum	--	18.6	2	Composite	6010B ICP
Nickel	420	43.2	2	Composite	6010B ICP
Selenium	36	8.1	2	Composite	6010B ICP
Zinc	2800	836	2	Composite	6010B ICP

Certification

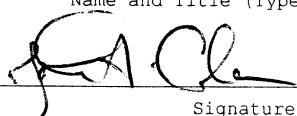
I certify under penalty of law that this document and all attachments were prepared under my supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information submitted, it is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information.

John A. Claus, Operations Manager

Name and Title (Type or print)

(909) 351-6187

Area Code and Phone



Signature

9/11/00

Date Signed

Table 3 concentration limits are referenced to demonstrate that the sludge is of exceptional quality in regards to metals.

Water Reclamation Division  
Public Works Department  
City of Riverside, CA

Monthly Sludge Disposal Report

July                      2000  
Month                      Year

During this month, 1,694.49 tons of Biosolids were removed by our subcontractor, Synagro of California, Inc., located at P.O. Box 7027, Corona, CA, 92878-7027. They are currently performing land application of the biosolids. During this month, 0 tons of Biosolids were removed by our subcontractor, One Stop Landscape Supply, located at 13024 San Timoteo Canyon Road, Redlands, CA 92373. They are currently performing composting with the biosolids.

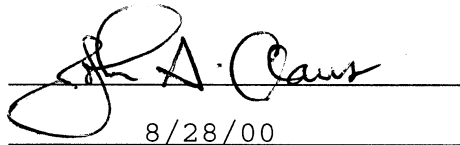
Laboratory analysis data is attached certifying the Biosolids generated at this plant to be a clean Class B sludge.

Digester data is attached certifying the Biosolids have met the time and temperature requirements for Class B Pathogen Reduction through Anaerobic Digestion as well as the Vector Attraction requirement of more than 38% volatile solids reduction.

"I certify, under penalty of law, that the Class B pathogen requirements in 503.32(b) and the vector attraction reduction requirement in 503.33(b)1 have been met. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the pathogen and vector attraction reduction requirements have been met. I am aware that there are significant penalties for false certification including fine and imprisonment."

Signature

Date

  
8/28/00

Water Reclamation Division  
Public Works Department  
City of Riverside, CA

Monthly Sludge Disposal Report

August            2000  
Month                Year

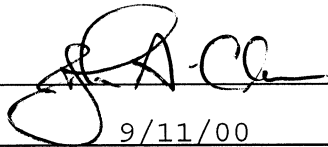
During this month, 604.28 tons of Biosolids were removed by our subcontractor, Synagro of California, Inc., located at P.O. Box 7027, Corona, CA, 92878-7027. They are currently performing land application of the biosolids. During this month, 553.06 tons of Biosolids were removed by our subcontractor, One Stop Landscape Supply, located at 13024 San Timoteo Canyon Road, Redlands, CA 92373. They are currently performing composting with the biosolids.

Laboratory analysis data is attached certifying the Biosolids generated at this plant to be a clean Class B sludge.

Digester data is attached certifying the Biosolids have met the time and temperature requirements for Class B Pathogen Reduction through Anaerobic Digestion as well as the Vector Attraction requirement of more than 38% volatile solids reduction.

"I certify, under penalty of law, that the Class B pathogen requirements in 503.32(b) and the vector attraction reduction requirement in 503.33(b)1 have been met. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the pathogen and vector attraction reduction requirements have been met. I am aware that there are significant penalties for false certification including fine and imprisonment."

Signature

  
\_\_\_\_\_

Date

9/11/00

**Biosolids Processing Data**  
**July - August 2000**

	Digester Influent	Digester Effluent	Average Volatile	Belt Press Discharge	Digester #1	Digester #2	Digester	
	Volatile Suspended Solids	Volatile Suspended Solids	Suspended Solids Reduction		Temperature	Temperature	Detention Time (days)	
DATE	%	%	%	Dry Tons	°C	°C	Measured	Required
7/1/2000				0.00	38.0	38.0	19.8	6.0
7/2/2000				0.00	38.0	38.0	19.8	6.0
7/3/2000	80	66	51	9.99	38.0	38.0	19.7	6.0
7/4/2000	79	66	48	12.96	38.0	38.0	19.4	6.0
7/5/2000	80	66	50	34.71	38.0	38.2	19.3	5.8
7/6/2000	80	67	48	24.38	38.0	38.0	16.9	6.0
7/7/2000	80	67	50	11.82	38.0	38.0	15.6	6.0
7/8/2000				0.00	38.0	38.0	15.9	6.0
7/9/2000				0.00	38.0	38.0	15.6	6.0
7/10/2000	79	66	50	26.28	38.0	38.0	15.7	6.0
7/11/2000	80	66	50	23.72	38.0	38.0	15.8	6.0
7/12/2000	79	67	46	32.12	38.0	38.0	16.1	6.0
7/13/2000	79	68	42	23.64	38.0	38.0	16.2	6.0
7/14/2000	79	67	47	19.69	38.0	37.8	16.0	6.3
7/15/2000				0.00	38.0	38.0	15.9	6.0
7/16/2000				0.00	38.0	38.0	18.4	6.0
7/17/2000	79	67	46	25.42	38.0	38.0	17.7	6.0
7/18/2000	79	65	49	6.29	38.0	38.0	16.1	6.0
7/19/2000	79	66	47	29.79	38.0	38.0	16.1	6.0
7/20/2000	79	67	47	24.16	38.0	38.0	15.9	6.0
7/21/2000	79	67	45	16.48	38.0	38.0	15.6	6.0
7/22/2000				0.00	38.0	38.0	15.7	6.0
7/23/2000				0.00	38.0	38.0	15.7	6.0
7/24/2000	79	66	48	24.41	38.0	38.0	16.4	6.0
7/25/2000	78	66	46	26.09	38.0	38.0	15.6	6.0
7/26/2000	79	67	45	24.19	38.0	38.0	15.1	6.0
7/27/2000	78	66	46	23.95	38.0	38.0	15.0	6.0
7/28/2000	78	66	46	23.18	38.0	38.0	14.9	6.0
7/29/2000				0.00	38.0	38.0	15.3	6.0
7/30/2000				0.00	38.0	38.0	15.3	6.0
7/31/2000	78	66	44	23.63	38.0	38.0	15.4	6.0
8/1/2000	79	67	45	16.00	38.0	38.0	15.5	6.0
8/2/2000	79	67	46	31.86	38.0	38.0	13.4	6.0
8/3/2000	79	67	45	25.85	38.0	38.0	13.0	6.0
8/4/2000	78	66	44	12.51	38.0	38.0	12.9	6.0
8/5/2000				0.00	38.0	38.0	13.2	6.0
8/6/2000				9.31	38.0	38.0	13.8	6.0



**Biosolids Processing Data**  
**July - August 2000**

	Digester Influent	Digester Effluent	Average Volatile	Belt Press Discharge	Digester #1	Digester #2	Digester	
	Volatile Suspended Solids	Volatile Suspended Solids	Suspended Solids Reduction		Temperature	Temperature	Detention Time (days)	
DATE	%	%	%	Dry Tons	°C	°C	Measured	Required
8/7/2000	77	66	42	26.78	38.0	38.0	14.0	6.0
8/8/2000	77	66	41	27.95	38.0	38.0	14.4	6.0
8/9/2000	77	66	43	38.95	38.0	38.0	14.3	6.0
8/10/2000	78	66	44	26.07	38.0	38.0	14.6	6.0
8/11/2000	77	66	43	24.90	38.0	38.0	14.7	6.0
8/12/2000				0.00	38.0	38.0	14.8	6.0
8/13/2000				0.00	38.0	38.0	15.4	6.0
8/14/2000	78	66	46	24.18	38.0	38.0	16.3	6.0
8/15/2000	78	65	47	24.39	38.0	38.0	16.0	6.0
8/16/2000	79	66	47	31.75	38.0	38.0	15.3	6.0
8/17/2000	78	66	46	23.27	38.0	38.0	14.7	6.0
8/18/2000	77	65	44	11.16	38.0	38.0	14.7	6.0
8/19/2000				0.00	38.0	38.0	14.5	6.0
8/20/2000				0.00	38.0	38.0	14.3	6.0
8/21/2000	78	65	49	24.53	38.0	38.0	14.1	6.0
8/22/2000	77	66	43	22.44	38.0	38.0	12.9	6.0
8/23/2000	79	66	47	32.58	38.2	38.2	13.7	5.4
8/24/2000	78	66	44	17.13	38.8	38.8	13.5	3.5
8/25/2000	78	66	47	25.14	38.6	38.6	14.0	4.2
8/26/2000				0.00	39.0	39.0	14.7	3.0
8/27/2000				0.00	39.0	38.0	14.7	4.5
8/28/2000	79	66	48	24.15	38.3	38.3	15.0	5.1
8/29/2000	79	65	49	22.30	38.6	38.5	15.0	4.4
8/30/2000	79	65	50	34.03	38.2	38.3	14.7	5.3
8/31/2000	80	65	53	26.01	38.0	38.0	15.1	6.0
Minimum	77	65	41	0.00	38.0	37.8	12.9	3.0
Maximum	80	68	53	38.95	39.0	39.0	19.8	6.3
Average	78	66	46	16.94	38.1	38.1	15.5	5.8
Total				1050.15				

## VECTOR ATTRACTION REDUCTION AND PATHOGEN REDUCTION

1. Facility Name Riverside Regional Water 2. Facility Owner's Name City of  
Quality Control Plant Riverside

Address 5950 Acorn St.

Address 3900 Main Street

City Riverside

City Riverside

State CA Zip 92504

State CA Zip 92522

3. Monitoring Period:

Reporting Period:

From 09/01/00 To 10/31/00

From 09/01/00 To 10/31/00

4. NPDES Permit No: CA 0105350

Sludge Permit No: N/A

5. Facility Latitude: 33° 57' 55" N Facility Longitude: 117° 27' 28" W

Site Map Attached Yes ☒ No ☐

6. Attach a description of vector attraction reduction procedures that identifies specific treatment units or activities and describes operating procedures. Include target values for all operating parameters such as treatment capacity, sludge detention time, operating temperature, pH, and percent solids. Also include a description of standard procedures for regular evaluation of the operating parameters.

16 Number of pages attached ☒ Schematic diagram or drawing attached.

### VECTOR ATTRACTION REDUCTION - OPTION 1 [40 CFR 503.33 (B)(1)]

7. The City of Riverside utilizes Alternative 1 (Mass of volatile solids in the sewage sludge been reduced by at least 38%) to demonstrate compliance with the regulations.

a. Alternative 1 - Time and Temperature

Has the mass of volatile solids in the sewage sludge been reduced by at least 38%?

yes	no
<input checked="" type="checkbox"/>	<input type="checkbox"/>

Frequency volatile solids reduction is verified 40 per period.

### PATHOGENS REDUCTION CLASS B - ALTERNATIVE 2 [40 CFR 503.32 (B) (3)]

8. Anaerobic Digestion

a. Was the residence time for the sewage sludge between 15 days at 35°C to 55°C and 60 days at 20°C?

yes	no
<input checked="" type="checkbox"/>	<input type="checkbox"/>

b. Provide the frequency of temperature measurements (i.e. continuous, 1 per hour, etc.)

1/shift, 3 shifts/day

c. Provide the average detention time and digester operating temperature for the reporting period 16.2 days at 37.4 °C.

MONITORING PERIOD

September 1, 2000 through October 31, 2000

Parameter	Table 3 Pollutant Concentrations	Maximum Pollutant Concentration MG/KG	Frequency of Analysis	Sample Type, Grab or Composite	Analytical Method
Arsenic	41	7.06	2	Composite	6010B ICP
Cadmium	39	2.44	2	Composite	6010B ICP
Chromium	1200	56.48	2	Composite	6010B ICP
Copper	1500	860	2	Composite	6010B ICP
Lead	300	48.2	2	Composite	6010B ICP
Mercury	17	1.20	2	Composite	245.5
Molybdenum	--	20.3	2	Composite	6010B ICP
Nickel	420	37.9	2	Composite	6010B ICP
Selenium	36	6.88	2	Composite	6010B ICP
Zinc	2800	893	2	Composite	6010B ICP

Certification

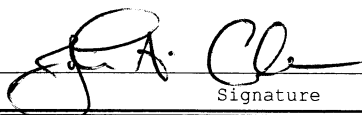
I certify under penalty of law that this document and all attachments were prepared under my supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information submitted, it is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information.

John A. Claus, Operations Manager

Name and Title (Type or print)

(909) 351-6187

Area Code and Phone



Signature

11/21/00

Date Signed

Table 3 concentration limits are referenced to demonstrate that the sludge is of exceptional quality in regards to metals.

Water Reclamation Division  
Public Works Department  
City of Riverside, CA

Monthly Sludge Disposal Report

September      2000  
Month              Year

During this month, 711.04 tons of Biosolids were removed by our subcontractor, Synagro of California, Inc., located at P.O. Box 7027, Corona, CA, 92878-7027. They are currently performing land application of the biosolids. During this month, 0 tons of Biosolids were removed by our subcontractor, One Stop Landscape Supply, located at 13024 San Timoteo Canyon Road, Redlands, CA 92373. They are currently performing composting with the biosolids.

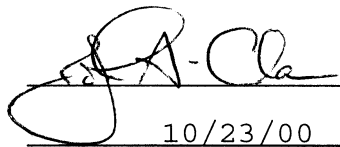
Laboratory analysis data is attached certifying the Biosolids generated at this plant to be a clean Class B sludge.

Digester data is attached certifying the Biosolids have met the time and temperature requirements for Class B Pathogen Reduction through Anaerobic Digestion as well as the Vector Attraction requirement of more than 38% volatile solids reduction.

"I certify, under penalty of law, that the Class B pathogen requirements in 503.32(b) and the vector attraction reduction requirement in 503.33(b)1 have been met. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the pathogen and vector attraction reduction requirements have been met. I am aware that there are significant penalties for false certification including fine and imprisonment."

Signature

Date

  
10/23/00

Water Reclamation Division  
Public Works Department  
City of Riverside, CA

Monthly Sludge Disposal Report

October      2000  
Month          Year

During this month, 222.76 tons of Biosolids were removed by our subcontractor, Synagro of California, Inc., located at P.O. Box 7027, Corona, CA, 92878-7027. They are currently performing land application of the biosolids. During this month, 557.05 tons of Biosolids were removed by our subcontractor, One Stop Landscape Supply, located at 13024 San Timoteo Canyon Road, Redlands, CA 92373. They are currently performing composting with the biosolids.

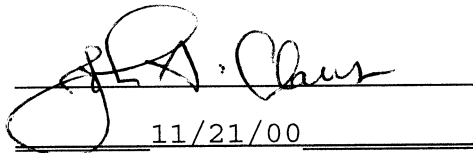
Laboratory analysis data is attached certifying the Biosolids generated at this plant to be a clean Class B sludge.

Digester data is attached certifying the Biosolids have met the time and temperature requirements for Class B Pathogen Reduction through Anaerobic Digestion as well as the Vector Attraction requirement of more than 38% volatile solids reduction.

"I certify, under penalty of law, that the Class B pathogen requirements in 503.32(b) and the vector attraction reduction requirement in 503.33(b)1 have been met. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the pathogen and vector attraction reduction requirements have been met. I am aware that there are significant penalties for false certification including fine and imprisonment."

Signature

Date

  
11/21/00

**Biosolids Processing Data**  
**September - October 2000**

	Digester Influent	Digester Effluent	Average Volatile	Belt Press Discharge	Digester #1	Digester #2	Digester	
	Volatile Suspended Solids	Volatile Suspended Solids	Suspended Solids Reduction		Temperature	Temperature	Detention Time (days)	
DATE	%	%	%	Dry Tons	°C	°C	Measured	Required
9/1/2000	79	65	51	23.48	38.0	38.0	14.6	6.0
9/2/2000				0.00	38.0	38.0	15.0	6.0
9/3/2000				0.00	37.5	37.6	15.0	7.4
9/4/2000	79	65	49	26.34	37.5	37.8	16.9	7.0
9/5/2000	78	65	48	23.67	37.6	38.0	18.1	6.6
9/6/2000	79	66	49	21.70	37.8	37.9	18.0	6.4
9/7/2000	79	65	50	22.40	38.0	38.0	17.7	6.0
9/8/2000	79	65	51	9.67	38.0	38.0	17.6	6.0
9/9/2000				0.00	38.0	38.0	17.8	6.0
9/10/2000				0.00	37.3	37.3	16.1	8.1
9/11/2000	80	65	52	12.34	37.1	37.4	14.5	8.2
9/12/2000	79	66	50	24.71	37.5	37.6	14.8	7.4
9/13/2000	79	65	50	28.13	37.3	37.5	15.0	7.8
9/14/2000	78	66	46	14.64	37.0	37.0	15.0	9.0
9/15/2000	78	66	46	22.95	37.0	37.0	14.7	9.0
9/16/2000				0.00	37.0	37.0	15.0	9.0
9/17/2000				0.00	37.0	37.0	15.0	9.0
9/18/2000	79	65	51	24.47	37.0	37.0	15.0	9.0
9/19/2000	81	67	52	24.91	37.6	37.6	15.5	7.2
9/20/2000	80	65	53	28.96	37.4	37.0	16.1	8.4
9/21/2000	80	65	53	24.76	37.5	37.5	16.0	7.5
9/22/2000	80	64	57	22.28	37.3	37.3	16.2	8.1
9/23/2000				0.00	37.0	37.0	16.6	9.0
9/24/2000				0.00	37.2	37.2	17.4	8.5
9/25/2000	79	65	52	18.47	37.5	37.5	18.7	7.5
9/26/2000	80	65	53	25.35	37.5	37.5	19.2	7.5
9/27/2000	79	65	52	34.56	37.2	37.3	19.2	8.3
9/28/2000	80	66	52	12.15	37.5	37.5	18.8	7.5
9/29/2000	79	71	37	9.43	37.5	37.5	18.1	7.5
9/30/2000				0.00	37.1	37.1	18.7	8.7
10/1/2000				0.00	37.5	37.8	18.4	7.0
10/2/2000	79	65	51	23.32	37.4	37.5	17.7	7.6
10/3/2000	79	65	51	18.77	37.8	37.6	17.0	6.9
10/4/2000				22.64	37.3	37.2	14.1	8.3
10/5/2000	79	65	52	25.94	37.6	37.5	16.6	7.4
10/6/2000	78	66	45	18.93	37.2	37.5	16.2	8.0
10/7/2000				0.00	37.5	37.5	17.3	7.5

**Biosolids Processing Data**  
**September - October 2000**

DATE	Digester Influent	Digester Effluent	Average Volatile	Belt Press Discharge	Digester #1	Digester #2	Digester	
	Volatile Suspended Solids	Volatile Suspended Solids	Suspended Solids Reduction		Temperature	Temperature	Detention Time (days)	
	%	%	%	Dry Tons	°C	°C	Measured	Required
10/8/2000				0.00	37.5	37.5	16.7	7.5
10/9/2000	80	67	48	22.88	37.5	37.3	16.5	7.8
10/10/2000	80	66	52	22.68	37.5	37.5	16.0	7.5
10/11/2000	80	66	52	17.43	37.3	37.3	16.7	8.1
10/12/2000	79	65	51	21.92	37.5	37.5	16.9	7.5
10/13/2000	80	67	48	21.59	37.5	37.5	16.8	7.5
10/14/2000				0.00	37.0	37.0	16.2	9.0
10/15/2000				0.00	37.3	37.3	15.2	8.1
10/16/2000	79	65	50	26.60	37.0	37.0	15.1	9.0
10/17/2000	80	66	51	22.51	37.0	37.2	15.4	8.8
10/18/2000	80	65	54	33.76	37.4	37.5	15.8	7.6
10/19/2000	80	67	51	24.74	37.2	37.5	15.8	8.0
10/20/2000	81	67	53	20.19	37.0	37.0	15.4	9.0
10/21/2000				0.00	37.5	37.0	15.0	8.3
10/22/2000				0.00	37.2	37.2	15.2	8.5
10/23/2000	79	65	52	22.60	37.0	37.2	15.2	8.8
10/24/2000	80	66	50	25.50	37.0	37.2	14.6	8.8
10/25/2000		66		39.35	37.3	37.3	15.3	8.1
10/26/2000	80			19.50	37.5	37.5	14.9	7.5
10/27/2000	80	67	48	27.29	37.0	37.0	15.0	9.0
10/28/2000				0.00	37.0	37.0	16.3	9.0
10/29/2000				0.00	37.2	37.0	15.3	8.8
10/30/2000	80	65	53	22.61	37.2	37.0	14.1	8.8
10/31/2000	79	66	49	25.42	37.0	37.8	14.5	7.8
Minimum	78	64	37	0.00	37.0	37.0	14.1	6.0
Maximum	81	71	57	39.35	38.0	38.0	19.2	9.0
Average	79	66	50	16.09	37.4	37.4	16.2	7.9
Total				981.57				

**VECTOR ATTRACTION REDUCTION AND PATHOGEN REDUCTION**

1. Facility Name Riverside Regional Water 2. Facility Owner's Name City of  
Quality Control Plant Riverside

Address 5950 Acorn St.

Address 3900 Main Street

City Riverside

City Riverside

State CA Zip 92504

State CA Zip 92522

3. Monitoring Period:

Reporting Period:

From 11/01/00 To 12/31/00 From 11/01/00 To 12/31/00

4. NPDES Permit No: CA 0105350 Sludge Permit No: N/A

5. Facility Latitude: 33° 57' 55" N Facility Longitude: 117° 27' 28" W

Site Map Attached Yes ☒ No ☐

6. Attach a description of vector attraction reduction procedures that identifies specific treatment units or activities and describes operating procedures. Include target values for all operating parameters such as treatment capacity, sludge detention time, operating temperature, pH, and percent solids. Also include a description of standard procedures for regular evaluation of the operating parameters.

16 Number of pages attached ☒ Schematic diagram or drawing attached.

**VECTOR ATTRACTION REDUCTION - OPTION 1 [40 CFR 503.33 (B)(1)]**

7. The City of Riverside utilizes Alternative 1 (Mass of volatile solids in the sewage sludge been reduced by at least 38%) to demonstrate compliance with the regulations.

a. Alternative 1 - Time and Temperature

Has the mass of volatile solids in the sewage sludge been reduced by at least 38%?

yes	no
<input checked="" type="checkbox"/>	<input type="checkbox"/>

Frequency volatile solids reduction is verified 36 per period.

**PATHOGENS REDUCTION CLASS B - ALTERNATIVE 2 [40 CFR 503.32 (B) (3)]**

8. Anaerobic Digestion

a. Was the residence time for the sewage sludge between 15 days at 35°C to 55°C and 60 days at 20°C?

yes	no
<input checked="" type="checkbox"/>	<input type="checkbox"/>

b. Provide the frequency of temperature measurements (i.e. continuous, 1 per hour, etc.)

1/shift, 3 shifts/day

c. Provide the average detention time and digester operating temperature for the reporting period 16.6 days at 37.0°C.



MONITORING PERIOD

November 1, 2000 through December 31, 2000

Parameter	Table 3 Pollutant Concentrations	Maximum Pollutant Concentration MG/KG	Frequency of Analysis	Sample Type, Grab or Composite	Analytical Method
Arsenic	41	7.02	2	Composite	6010B ICP
Cadmium	39	3.66	2	Composite	6010B ICP
Chromium	1200	42.5	2	Composite	6010B ICP
Copper	1500	786	2	Composite	6010B ICP
Lead	300	50.8	2	Composite	6010B ICP
Mercury	17	0.52	2	Composite	245.5
Molybdenum	--	19.7	2	Composite	6010B ICP
Nickel	420	19.4	2	Composite	6010B ICP
Selenium	36	7.48	2	Composite	6010B ICP
Zinc	2800	758	2	Composite	6010B ICP

Certification

I certify under penalty of law that this document and all attachments were prepared under my supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information submitted, it is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information.

John A. Claus, Operations Manager

Name and Title (Type or print)

(909) 351-6187

Area Code and Phone



Signature

1/29/01

Date Signed

Table 3 concentration limits are referenced to demonstrate that the sludge is of exceptional quality in regards to metals.

Water Reclamation Division  
Public Works Department  
City of Riverside, CA

Monthly Sludge Disposal Report

December      2000  
Month              Year

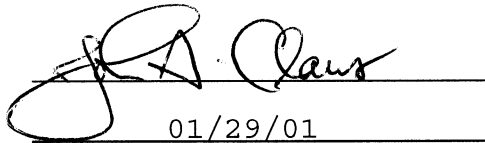
During this month, 23.94 tons of Biosolids were removed by our subcontractor, Synagro West, Inc., located at P.O. Box 7027, Corona, CA, 92878-7027. They are currently performing land application of the biosolids. During this month, 604.60 tons of Biosolids were removed by our subcontractor, One Stop Landscape Supply, located at 13024 San Timoteo Canyon Road, Redlands, CA 92373. They are currently performing composting with the biosolids.

Laboratory analysis data is attached certifying the Biosolids generated at this plant to be a clean Class B sludge.

Digester data is attached certifying the Biosolids have met the time and temperature requirements for Class B Pathogen Reduction through Anaerobic Digestion as well as the Vector Attraction requirement of more than 38% volatile solids reduction.

"I certify, under penalty of law, that the Class B pathogen requirements in 503.32(b) and the vector attraction reduction requirement in 503.33(b)1 have been met. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the pathogen and vector attraction reduction requirements have been met. I am aware that there are significant penalties for false certification including fine and imprisonment."

Signature



Date

01/29/01

**Biosolids Processing Data**  
**November - December 2000**

	Digester Influent	Digester Effluent	Average Volatile	Belt Press Discharge	Digester #1	Digester #2	Digester	
	Volatile Suspended Solids	Volatile Suspended Solids	Suspended Solids Reduction		Temperature	Temperature	Detention Time (days)	
DATE	%	%	%	Dry Tons	°C	°C	Measured	Required
11/1/2000	80	66	50	31.75	37.0	37.0	15.0	9.0
11/2/2000	80	66	51	21.40	37.0	37.5	14.8	8.3
11/3/2000	80	66	52	25.80	37.0	37.0	14.5	9.0
11/4/2000				0.00	37.5	37.0	15.2	8.3
11/5/2000				0.00	37.3	37.3	14.8	8.1
11/6/2000	81	66	55	25.53	37.0	37.0	15.3	9.0
11/7/2000	81	65	57	16.52	37.2	37.0	15.8	8.8
11/8/2000	82	65	58	29.00	37.3	37.0	16.9	8.6
11/9/2000	80	66	52	17.89	37.0	37.0	15.8	9.0
11/10/2000	80	66	52	12.21	37.0	37.0	16.9	9.0
11/11/2000				0.00	37.0	37.0	16.7	9.0
11/12/2000				0.00	37.2	37.0	17.0	8.8
11/13/2000	85	66	65	25.70	37.0	37.0	16.8	9.0
11/14/2000	81	66	53	24.43	37.0	37.0	17.7	9.0
11/15/2000	82	66	56	35.73	37.3	35.8	16.0	10.3
11/16/2000		66		23.17	37.0	37.0	17.8	9.0
11/17/2000	80	67	49	8.76	37.0	37.0	30.2	9.0
11/18/2000				0.00	37.0	37.0	17.8	9.0
11/19/2000				0.00	37.0	37.0	17.4	9.0
11/20/2000	77			24.84	37.0	37.0	17.7	9.0
11/21/2000	83	63	66	18.98	37.0	37.0	22.1	9.0
11/22/2000	78	55	65	35.64	37.3	37.3	24.0	8.1
11/23/2000	78	63	51	13.52	37.0	37.0	23.6	9.0
11/24/2000	80	61	61	4.66	37.0	37.0	22.9	9.0
11/25/2000				0.00	37.0	37.0	16.5	9.0
11/26/2000				0.00	37.5	37.3	17.8	7.8
11/27/2000	79	60	59	21.86	37.0	37.0	17.0	9.0
11/28/2000				24.62	37.0	37.0	17.9	9.0
11/29/2000	77	67	38	23.72	37.6	37.6	15.3	7.2
11/30/2000	80	56	67	18.00	37.0	37.0	14.8	9.0
12/1/2000	79	67	47	9.38	37.0	37.0	17.7	9.0
12/2/2000				0.00	37.0	37.0	15.2	9.0
12/3/2000				0.00	37.6	37.5	14.4	7.4
12/4/2000	79	65	51	25.76	37.0	37.2	14.0	8.8
12/5/2000	81	66	56	24.10	37.0	37.0	13.8	9.0
12/6/2000	81	65	56	31.90	37.0	37.0	14.7	9.0
12/7/2000	81	67	51	28.29	37.0	37.2	14.1	8.8
12/8/2000	80	66	53	12.37	37.5	37.5	13.7	7.5

**Biosolids Processing Data**  
**November - December 2000**

	Digester Influent	Digester Effluent	Average Volatile	Belt Press Discharge	Digester #1	Digester #2	Digester	
	Volatile Suspended Solids	Volatile Suspended Solids	Suspended Solids Reduction		Temperature	Temperature	Detention Time (days)	
DATE	%	%	%	Dry Tons	°C	°C	Measured	Required
12/9/2000				0.00	37.2	37.2	13.8	8.4
12/10/2000				0.00	37.0	37.0	20.1	9.0
12/11/2000	81	66	54	23.82	37.0	37.0	16.9	9.0
12/12/2000	81	68	51	22.90	37.0	37.0	15.4	9.0
12/13/2000	81	65	56	31.28	37.0	37.0	15.3	9.0
12/14/2000	81			22.61	37.0	37.0	16.8	9.0
12/15/2000	81	65	57	24.38	37.0	37.0	16.8	9.0
12/16/2000				0.00	37.0	37.0	17.7	9.0
12/17/2000				0.00	37.8	37.9	16.9	6.5
12/18/2000	80	66	53	25.80	37.0	37.6	21.0	8.1
12/19/2000	80	66	52	25.78	37.0	37.0	16.2	9.0
12/20/2000	81	69	47	39.67	37.0	37.0	17.9	9.0
12/21/2000	81	68	49	20.13	37.0	37.0	16.6	9.0
12/22/2000	80	67	50	11.02	37.0	37.0	17.8	9.0
12/23/2000				0.00	37.5	37.5	14.5	7.5
12/24/2000				0.00	37.5	37.5	14.5	7.5
12/25/2000				27.99	37.5	37.5	14.0	7.5
12/26/2000	81	65	58	25.23	37.2	37.0	14.4	8.8
12/27/2000	81	67	52	47.74	36.8	36.8	13.9	9.5
12/28/2000	80			7.04	36.0	36.5	13.6	11.3
12/29/2000	76			0.00	36.0	35.5	13.8	12.8
12/30/2000				19.63	35.5	36.0	13.5	12.8
12/31/2000				0.00	36.6	36.5	14.8	10.4
Minimum	76	55	38	0.00	35.5	35.5	13.5	6.5
Maximum	85	69	67	47.74	37.8	37.9	30.2	12.8
Average	80	65	54	16.24	37.0	37.0	16.6	8.9
Total				990.53				